Psychc

ELATERIDÆ AND THROSCIDÆ OF THE STANFORD UNIVERSITY EXPEDITION OF 1911 TO BRAZIL.

By J. A. Hyslop,

Bureau of Entomology, Washington, D. C.

Through the kindness of Dr. W. M. Mann, of the Bussey Institution, Harvard University, I have been accorded the great pleasure of examining the *Elaterida* and the single Throscid collected on the Stanford expedition of 1911 to Brazil.

The collection is small and, contrary to most tropical collections, contains excellent series of several species. It contains three new species, two in the genus *Monocrepidius* and one which I tentatively place in the genus *Drasterius*. The types of these species have been deposited in the Museum of Comparative Zoölogy at Harvard University. The Madeira River collections are remarkably interesting as the fauna of this region is bound to throw light on the relationship between the Andean and Amazonian basin faunæ, and thus to the relationship between the South and Central American faunas. Following is a list of the specimens collected. The *Elateridæ* were all collected by W. M. Mann, Fred Baker and Harold Heath.

THROSCIDÆ.

Drapetes plagiatus (Boh.) Gerst.

Abuná, Rio Madeira, Brazil. (Mann & Baker).....1 specimen

Previously recorded from several parts of Central and South America, and Boheman has recorded the species from San Francisco, Cal.

ELATERIDÆ.

Chalcolepidius candezei Dohrn.

forma typica

Porto Velho, Rio Madeira, Brazil (Mann & Baker).....1 ♀ specimen var. b. vestiture of elytral strike ferruginous yellow, pronotum and ventral vestiture green.

Madeira-Mamoré R. R. Co. Camp 39, Rio Madeira, Brazil (Mann & Baker) 7 & specimens .

Madeira-Mamoré R. R. Co. Camp 35, Rio Madeira, Brazil (Mann & Baker)
1 Q specimen
Madeira-Mamoré R. R. Co. Camp 41, Rio Madeira, Brazil (Mann & Baker)
2 Q specimens
Madeira-Mamoré R. R. Co. Camp 43, Rio Madeira, Brazil (Mann & Baker)
1 Q specimen
Chalcolepidius limbatus Esch.
Maranguape Mountains, Ceará, Brazil (W. M. Mann)1♂,1♀ specimen
Independéncia, Parahyba, Brazil (Mann & Heath)1 9 specimen
Semiotus furcatus (F.) Lap. var.
Abuná, Rio Madeira, Brazil (Mann & Baker)1 specimen
Semiotus ligneus (Linn.) Westwood.
Madeira-Mamoré R. R. Co. Camp 39, Rio Madeira, Brazil (Mann & Baker)
1 specimen
Semiotus suturalis (F.) Lap.
Rio Madeira, Brazil (Mann & Baker)1 specimen
Ischiodontus nigrita Cand.
Pará, Brazil (W. M. Mann)1 specimen
Ischiodontus ichthydius Cand.
Manaos, Brazil (Mann & Baker)1 specimen
Previously only recorded from Central America and Mexico.
Ischiodontus subscriceus Cand.
Pará, Brazil (W. M. Mann)1 specimen
Pyrophorus noctilucus (Linn.) Esch.
Madeira-Mamoré R. R. Co. Camp 39, Rio Madeira, Brazil (Mann & Baker)
1 ♂ ⁷ , 1 ♀ specimen
Common in all parts of intertropical America.
Pyrophorus amplicollis Cand.
Madeira-Mamoré R. R. Co. Camp 39, Rio Madeira, Brazil (Mann & Baker)
1 Q specimen
Cardiorhinus bilincatus (Fab.) Germ.
Pará, Brazil (W. M. Mann)1 specimen
Cardiorhinus cuneatus Cand.
Manaos, Brazil (Mann & Baker) 1 specimen
Cardiorhinus castanipenuis Germ.
Manaos, Brazil (Mann & Baker)1 specimen
Trichophorus crassus (Cand.) Schw.
Abuná, Rio Madeira, Brazil (Mann & Baker)1 specimen
Horistonotus clegans (Sol.) Cand.
Natal Brazil (W. M. Mann)
Monocrepidius brunnipennis Cand.
Independéncia, Parahyba, Brazil (Mann & Baker)1 specimen
Monocrepidius stigmosus Germ.
Independéncia, Parahyba, Brazil (Mann & Heath)1 specimen
Monocrepidius madiereusis sp. nov.
Rio Madeira, Brazil (Mann & Baker)1 specimen

Monocrepidius bakeri sp. n.
Rio Madeira, Brazil (Mann & Baker)1 specimen
Acolus testudineus Champ.
Itacoatiara, Amazonas, Brazil (Mann & Baker)1 specimen
The only other locality known is that of the two cotypes;
Paso Antonio, Guatemala, (Champ.).
Acolus biplagiatus Cand.
Independéncia, Parahyba, Brazil (Mann & Heath)
Ceará-mirim, Rio Grande do Norte, Brazil (W. M. Mann)1 specimen
Heteroderes laurentii (Guer.) Cand.
Porto Velho, Rio Madeira, Brazil (Mann & Baker)52 specimens
Rio Madeira, Brazil (Mann & Baker)
Itacoatiara, Amazonas, Brazil (Mann & Baker)1 specimen
Pará, Brazil (W. M. Mann)l specimen
Drasterius manni sp. n.
Independéncia, Parahyba, Brazil (Mann & Heath)4 specimens

The single specimen of Semiotus furcatus (Fab.) Lap. (Fig. 1, b) is a remarkable variety, as it is undoubtedly the intermediate between typical furcatus (Fig. 1, a) which inhabits eastern Amazonas, Venezuela, Guiana, etc., and S. bilineatus Cand. (Fig. 1, c) which is indigenous to Colombia. S. fulricollis Blanch. (Fig. 1, d) is but a variety of furcatus, separated on the furcation of the marginal black vitta being carried to the tip of the elytron, thereby making a submarginal vitta. In typical furcatus the marginal vitta is furcate to beyond the middle and the thoracic vitta is narrowly fusiform. In S. bilineatus the vitta is completely fused and the thoracic vitta is oval, and covers more than one third of the notum. The specimen in this collection and another similar specimen in my collection, taken at Pebas, Peru, the lateral marginal vittæ are similar to those of furcatus but the dorsal vittæ are similar to S. bilineatus.

The series of specimens of *Chalcolepidius candezei* Dohrn. include two very distinct varieties and one intermediate. The typical form collected at Abuná and Camp 39 has the strial vittæ thickly beset with whitish colored scales, and the prothorax and ventral surfaces with bronze purple scales.

Var. b. collected at R. R. Camps 35, 39, 41, and 43 has the elytral interstrial spaces clothed with metallic green scales and striæ beset with deep ferruginous scales, the thorax and ventron clothed with metallic green scales. Var. a. collected at Porto Velho is

intermediate between the other two. It has elytra like the *forma typica* and the rest of the vestiture similar to var. b.

Ischiodontus ichthydius Cand. is quite common in Mexico and Central America, but this is the first record I have seen of the collection of the species in continental South America. The collecting of *Aeolus testudineus* Champ. from Amazonas is remarkably interesting, inasmuch as this species is unknown in literature, except for the two cotypes mentioned by Champion¹ from Guatemala.

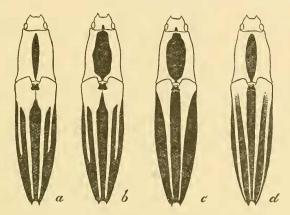


Fig. 1. Species of Semiotus; a. S. furcatus; b. S. furcatus, var.; c. S. bilineatus; d, S. fulvicollis.

Horistonotus elegans (Sol.) Cand. is recorded only from Chilki by Candèze.

Drasterius manni sp. nov. (Pl. V, Fig. 1a).

Piceous black, moderately densely greyish pilose, pile long. Anterior part of front, anterior angles of the prothorax, anterior angles and tip of elytra, obscurely reddish brown, under parts castaneous, legs dusky yellow, antennæ yellowish ferruginous. Front strongly umbilicate punctate, pronotum densely on sides and sparsely on disc umbilicate punctate (Pl. V, Fig. 1b). Posterior angles very short and almost rectangular, not carinate. Deep incision on posterio margin of pronotum near posterior angles. Propluræ moderately densely umbilicate-punctate, punctures elongate near the sutures (Pl. V, Fig. 1d) becoming round as they approach the side margins. Prosternum with but few scattered simple punctures almost without punctuation. Scutellum pentagonal. Posterior coxal plates (Pl. V, Fig. 1c) very abruptly widened near middle but without median tooth, outwardly promplete. Elytra punctate striate, strial punctures elongate and about as dis-

¹Biol. Centr. America, Vol. III, Coleop., p. 362, 1895.

Psyche

tantly placed as the interstitial spaces. Interstiees almost flat, not punctate, feebly rugose. Joints of tarsi (Pl. V, Fig. 1e) gradually decreasing in length from first to fourth. Ungues with basal angles strongly produced (Pl. V, Fig. 1f) Antennal joints two and three sub-equal, sylindrical, three almost as long as four. Joints four to ten elongate triangular, joint eleven suboval not strongly constricted.

Length, 3 to 4 mm.

Type locality: Independéncia, Parahyba, Brazil.

Type: No. 9048 deposited in Mus. Comp. Zoöl., Harvard University.

Para'ypes: Three specimens from type locality.

Type and paratypes collected by Messrs. W. W. Mann and Harold Heath.

This species, which is named in honor of Dr. W. M. Mann, will fall near *Drasterius pullatus* Cand. in Candèze's Monograph.

Monocrepidius madeirensis sp. nov. (Pl. V, Fig. 2a),

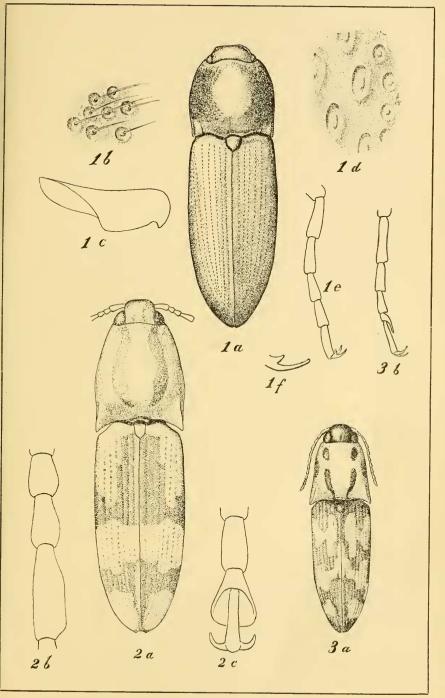
Moderately elongate, depressed, length four and two-third times width, moderately dense and finely yellow pubescent. General color reddish yellow or amber. Head concolorous with body, marked by two parenthesis-shaped infuscate vitte on vertex, eves dark brown; pronotum with a pair of parenthesis-shaped dark brown vitta which attain the anterior margin. Elytra slightly darker than the prothorax with two brown transverse bands, one before the middle and the other halfway between this band and the apex, and a median longitudinal vitta which extends from the seutellum to the anterior transverse band. Seutellum and humeral angles vellow. Ventron brownish yellow. Legs and antennæ yellow. Front slightly convex, finely punctate, anterior margin feebly rounded, terminal joint of maxilliary palpi seeuriform. Antennal joints two and three small, together not quite equal to four, joint three longer than two (Pl. V, Fig. 2b). Prothorax longer than broad, sides feebly rounded, convergent anteriorly from middle, quite depressed, pronotum with slightly unequal punctuation; posterior angles very slightly divergent, unicarinate, carina almost fused with lateral margin to base of posterior angles where they diverge, carina not much longer than angles. Elytra two and one-fourth times length of prothorax, almost as wide as latter, punctate striate, interstices slightly convex. not spinose at tips. Fourth tarsal joint (Pl. V, Fig. 2c) bearing a large broad lobe easily seen from above.

Length, 7 mm. Type locality: Rio Madeira, Brazil. Type: No. 9047 Mus. Comp. Zcöl. Harvard University. Type eolleeted by W. M. Mann and F. Baker.

This species is named from the type locality and is near *depressipennis* Cand.

Monocrepidius bakeri sp. nov. (Pl. V, 3a).

Elongate, slender, three and one-half times as long as broad, moderately convex, vestiture yellow, dense and very fine. General color infuscate amber; head black, labrum black, antennæ amber, under parts of head and palpi yellow; pronotum



Hyslop-New species of Elaterida.